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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/672,328	09/29/2000	James A. Belmont	99104CON	1547
<div>7590 Michelle B Lando Esq Cabot Corporation Law Department 157 Concord Road Billerica, MA 01821-7001</div>				
EXAMINER				
OH, TAYLOR V				
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1625				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/672,328

Applicant(s)

BELMONT, JAMES A.

Examiner

Taylor Victor Oh

Art Unit

1625

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-10, 12-19, 21-25, 29 and 32-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-10, 12-19, 21-25, 29 and 32-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

Final Rejection

The Status of Claims

Claims 8-10, 12-19, 21-25, 29, and 32-41 are pending.

Claims 8-10, 12-19, 21-25, 29, and 32-41 are rejected.

Claim Rejections-35 USC 112

1. Applicants' argument filed 08/08/08 have been fully considered but they are not persuasive.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The rejection of Claims 8-10, 12-19, 21-25, 29, and 32-39 under 35 U.S.C. 112, second paragraph, has been maintained due to applicants' failure to modify the claim languages in the claims in spite of the modification made in the claims 32-33 in the amendment.

Claim Rejections - 35 USC § 103

2. The rejection of Claims 9-10, 12-13, 21-25, and 32-39 under 35 U.S.C. 103(a) as being unpatentable over Adams et al (US 5,698,016) has been withdrawn due to applicants' convincing argument with a reason of record on 2/14/08.

However, in view of new claims 40-41 filed in the amendment, there is a new issue to be resolved in the followings:

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 40-41 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 99 and 101, and 111 of copending Application No. 11/709,630. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are related to each other as a genus and species relationship.

In the instant claims 40-41, the followings are described :

40. (new)

A carbon black product having attached

a) at least one steric group having the formula $-X-Sp-\{(CH_2)_m-O\}_pR\}_q$ or $-X-Sp-[A]_pR$,
wherein

X is attached to the pigment and is an arylene group or alkylene group;

Sp represents a spacer group and is a bond or a chemical group selected from the group consisting of: CO_2 , O_2C , SO_2 , CO , $NHCO$, $CONR^*$, NR^*CO_2 , $OCNR^*$, NR^*CONR^* , O , S , NR^* , $SO_2C_2H_4$, arylene, alkylene, NR^*CO , $NHCO_2$, O_2CNH , and $NCHONH$, wherein R^* , which can be the same or different, represents an aryl or alkyl group;

m is an integer of from 1 to 12;

p is an integer from 1 to 500;

A represents an alkylene oxide group of from about 1 to about 12 carbons, wherein A can be the same or different when p is greater than 1; and

R is hydrogen, a branched or unbranched C1-C12 alkyl group, or an aromatic group; and

b) at least one aromatic or C1-C12 alkyl group further substituted with at least one $-COO^-$, $-SO_3^-$, $-HPO_3^-$, or $-PO_3^{2-}$ group with at least one amphiphilic counterion.

41. (new)

A carbon black product having attached

a) at least one steric group having the formula $-X-Sp-[polymer]R$, wherein

X is attached to the pigment and is an arylene group or alkylene group;

Sp represents a spacer group and is a bond or a chemical group selected from the group consisting of: CO_2 , O_2C , SO_2 , CO , $NHCO$, $CONR^*$, NR^*CO_2 , $OCNR^*$, NR^*CONR^* , O , S , NR^* , $SO_2C_2H_4$, arylene, alkylene, NR^*CO , $NHCO_2$, O_2CNH , and $NCHONH$, wherein R^* , which can be the same or different, represents an aryl or alkyl group

"polymer" represents a polyolefin group, a polyurethane group, a polystyrenic group, a polyacrylate group, a polyamide group, a polyester group, or mixtures thereof, optionally having at least one $-X'$ group, wherein X' is an aromatic group, arylene group, alkyl group, or alkylene group, each X' and X can be the same or different; and the total amount of monomer groups of "polymer" is not greater than about 500 monomer repeating units;

R is hydrogen, a bond, a branched or unbranched C1-C12 alkyl group, or an aromatic group and when R represents a bond, R optionally bonds to said pigment; and

b) at least one aromatic or C1-C12 alkyl group further substituted with at least one $-COO^-$, $-SO_3^-$, $-HPO_3^-$, or $-PO_3^{2-}$ group with at least one amphiphilic counterion.

Whereas In the claims 111 of copending Application No. 11/709,630 copending, the followings are described :

111. (Currently amended) A black matrix formed by applying a photosensitive coating on a clear substrate, exposing the coating imagewise, and developing and drying the coating, wherein the photosensitive coating comprises at least one modified pigment product comprising:

- a) a pigment having attached at least one organic ionic group and at least one amphiphilic counterion, wherein said amphiphilic counterion has a charge opposite to that of the organic ionic group; or
- b) a pigment having attached at least one organic group represented by the formula $-X-Sp-[A]_pR$, $-X-Sp-[Vinyl]R$, $-X-Sp-[EI]R$, or $-X-Sp-[SMA]R$, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, p is an integer of from 1 to 500, A represents an alkylene oxide group of from about 1 to about 12 carbons and can be the same or different when p is greater than 1, Vinyl represents an acrylic or styrenic homo- or copolymer comprising repeating substituted or unsubstituted acrylic or styrene monomer units, EI represents an alkylencimine-based polymer or copolymer, R represents hydrogen, a substituted or unsubstituted alkyl group, or a substituted or unsubstituted aryl group, and SMA represents a styrene-maleic anhydride polymer or derivative; or

When the instant invention and the copending application are compared, there are lots of overlapping among the variables such as $-X-Sp[A]_pR$ in addition to the similarity between the names of the desired product (a black matrix vs. a carbon black product). Therefore, it would have been obvious to the skilled artisan in the art to be motivated to broaden the claimed invention by adding the formula of the organic groups in order to expand the coverage of the claimed invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicants' Argument

3. The applicants argue the following issues:
- a. The use of the expression " comprising " does not create any ambiguity to the metes and the bounds of this attached group which contains the specifically recited elements,; thus, the rejection should be withdrawn;
 - b. The examiner appears to be combining the Belmont et al with Adams et al in the 103 rejection.

The applicants' argument have been noted, but these arguments are not persuasive.

First, with regard to the first argument, the Examiner has noted applicants' argument. However, the expression "comprising" is still vague and indefinite. This is because what the meaning of the term "comprising" is that the one organic ionic group may contain many additional components. Furthermore, the term " comprising" leaves the claim open for the inclusion of unspecified ingredients even in major amounts. Ex parte Davis et al ., 80 USPQ 448 (PTO Bd App. 1948). It is well settled that the terms comprising and containing do not exclude the presence of other ingredients than the one or ones recited. Ex parte Muench, 79 USPQ 92 (PTO Bd. App. 1948). The examiner recommanedes to change from "comprising" to "consisting". An appropriate correction is required.

on contrary to applicants' assertion, in the instant case, the claim encompasses any pigments and organic ionic groups and amphiphilic counterion groups without any final concrete chemical structure. For example, the specification provide only 6 particular examples to represent the claimed invention of numerous modified pigments; applicants have merely listed the groups of pigments in the specification which were invented by other inventors. This does not give the current inventors a right to own all the possible combinations of pigments known in the art. Those examples can not be the representatives of the entire modified pigments. Thus, the specification herein have failed to provide sufficient working examples to support the claimed modified pigments and the method of making them. Therefore, the rejection is still relevant to the issue of the claimed invention.

Second, with regard to the second argument, the Examiner has noted applicants' argument. It was a mistake that happened during the copying previous Office action. There was no combined rejection based on the Belmont et al and Adams et al in the 103 rejection, but there was only the rejection of Claims under 35 U.S.C. 103(a) as being unpatentable over Adams et al (US 5,571,311), which is now withdrawn.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taylor Victor Oh whose telephone number is 571-272-0689. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on 571-272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Taylor Victor Oh/

Primary Examiner, Art Unit 1625

11/20/08